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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
PEREZ, JULIO R	

ART UNIT	PAPER NUMBER
2681	5

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/071,116	DE VERTEUIL, ANDRE LAURENT	
	Examiner	Art Unit	
	Julio R Perez	2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Reudink et al. (6195556).

Regarding claim 1, Reudink et al. disclose a method for use in providing location information regarding mobile units in a telecommunications network, comprising the steps of: first obtaining identification information regarding a mobile unit to be located and parameter information regarding the desired location information (col. 6, lines 43-58, it is inherent as evidenced by the fact that one of ordinary skill in the art would have recognized that a code representing the identity of a mobile station is transmitted from the mobile to the mobile switching center when a mobile is first powered on, such a

identity code corresponds to a mobile identification number (MIN) and/or an Electronic Serial Number (ESN); Further, the mobile unit, while communicating with BTSes, provides several attributes of a signal to the BTS; hence, providing parameter information to acquire mobile location information); second obtaining first location information regarding said mobile unit from a first source, said first source being associated with a first expected lag time relating to providing the first location information and a first expected resource requirement related to system resources involved in providing the first location information (col. 7, lines 9-57, location information may provided by signal strength data or by time difference of arrival, corresponding to a first source of providing the mobile location, which is related to the signal strengths, corresponding to system resources); performing a comparison of the first location information to the parameter information (col.9, lines 31- 67; col. 10, lines 1-6 and 46-67, signal strengths are calculated and compared to obtain the most accurate location of the mobile); based on said comparison, selectively obtaining second location information regarding said mobile unit from a second source different than said first source, said second source being associated with a second expected lag time relating to providing the second location information and a second expected resource requirement related to system resources involved in providing the second location information (col. 9, lines 47-67; col. 10, lines 36-67; col. 11, lines 19-50, more accuracy of the position of the mobile may obtained by using several BTSes, which are able to detect the mobile unit's signal; hence, corresponding to a second form of providing the mobile location); where at least one of the first expected lag time and first expected

resource requirement is greater than at least one of the second expected lag time and second expected resource requirement (col. 11, lines 36-50, a more accuracy may obtained with the use of several determinations of the mobile location, which are repeated several times between periods, to secure accuracy); and providing an output related to said location request based on at least one of said first location information and said second location information (col. 11, lines 51-61, the location determination about the mobile location is communicated to systems that require such location information).

Regarding claim 2, Reudink et al. disclose a method, wherein said step of first obtaining comprises receiving a location request from a location-based services application (col. 11, lines 62-67; col. 12, lines 1-11, the location information may be transferred to a location-based service, such as E911).

Regarding claim 3, Reudink et al. disclose a method, wherein said step of first obtaining comprises receiving a prompt from an application user and accessing information regarding one or more locations of interest (col. 12, lines 5-11, the location information may used for other specialized services; that may include providing location of interests to users).

Regarding claim 4, Reudink et al. disclose a method, wherein said one or more locations of interest comprise one or more zones of a location-based services application (col. 11, lines 62-67; col. 12, lines 12-26, the communication of the location of the mobile may be provided to the location-based services in dependence to the accurate location of the mobile itself, whose location is updated as the mobile moves

from one position to another; in fact, updating its position and obtaining more accurate location to be provided to the location services).

Regarding claim 5, Reudink et al. disclose a method, wherein said step of second obtaining comprises accessing Cell ID information available within said network (col. 9, lines 65-67; col. 10, lines 1-14, the mobile unit's signals are received by the BTSes, which, in fact, are associated with several base stations and to which the BTSes provide information about the cell and sector location information to the MSC; indeed, corresponding to the Cell ID data within the network).

Regarding claim 6, Reudink et al. disclose a method, wherein said step of performing a comparison comprises using said parameter information to define a condition to be evaluated with respect to the desired location information and making a determination as to whether said first location information is sufficient to evaluate said condition (col. 10, lines 36-57, the system utilizes multiple beams at one of the two base stations to determine the accuracy of the mobile position; that is after determining that uncertainty was presented when utilizing only on TDA calculation or as utilizing signal strength alone).

Regarding claim 7, Reudink et al. disclose a method, wherein said condition relates to determining a location of said mobile unit relative to a defined geographic zone and said determination involves evaluating whether said first information is substantially conclusive in establishing the location of said mobile unit relative to said defined zone (col. 10, lines 46-67, a determination with precise accuracy may be

obtained with the use of several base stations; indeed, providing a location related to a geographic position).

Regarding claim 8, Reudink et al. disclose a method, wherein said step of selectively obtaining comprises obtaining said second location information when said first location information yields an ambiguity with regard to the desired location information (col. 10, lines 36-51, the use of two TDA calculations provide a more trustful determination of the mobile location as compared to just one TDA calculation, which produces uncertainty of the position).

Regarding claim 9, Reudink et al. disclose a method, wherein said step of selectively obtaining comprises invoking said second source to provide said second location information, where said second location information has a location accuracy greater than said first information (col. 10, lines 36-67, the second method utilized to acquire the exact location of the mobile when using additional BTSes provide high degree of confidence for the determination of the mobile location).

Regarding claim 10, Reudink et al. disclose a method, wherein said step of selectively obtaining comprises receiving information from network based location determination equipment (col. 6, lines 59-67; col. 7, lines 1-8; col.10, lines 1-14, the network control system provides determination about the mobile position).

Regarding claim 11, Reudink et al. disclose a method, wherein said step of selectively obtaining comprises transmitting a location request designating one or said second source and a quality of service parameter associated with said second source

(col. 7, lines 9-33, the determination of the mobile location may be acquired via signal strength information or TDA data of the signal received).

Regarding claim 12, Reudink et al. disclose a method, wherein said step of providing an output comprises outputting a rating value for use in billing a call associated with said mobile unit (col. 12, lines 7-11, location information may also be conformed of service options such as billing related to the mobile location).

Regarding claim 13, Reudink et al. disclose a method, wherein said first source is a Cell ID source and said second source is one of a network based location determination equipment source and a GPS source (col. 6, lines 59-67; col. 7, lines 1-8; col. 9, lines 65-67; col. 10, lines 1-14, the sources that provide location may be from network location equipment or GPS sources).

Regarding claim 14, Reudink et al. disclose a method, further comprising the step of repeatedly invoking said first source prior to said step of selectively obtaining second location information (col. 11, lines 36-50, the initial location determination is conducted several times at certain time periods ion order to provide a better location decision at a later time).

Regarding claim 15, Reudink et al. disclose a method for use in providing location information regarding mobile units in a telecommunications network, comprising the steps of: obtaining identification information regarding a mobile unit to be located and parameter information regarding the desired location information (col. 6, lines 43-58, it is inherent as evidenced by the fact that one of ordinary skill in the art would have recognized that a code representing the identity of a mobile station is transmitted from

the mobile to the mobile switching center when a mobile is first powered on, such a identity code corresponds to a mobile identification number (MIN) and/or an Electronic Serial Number (ESN); Further, the mobile unit, while communicating with BTSes, provides several attributes of a signal to the BTS; hence, providing parameter information to acquire mobile location information); monitoring information from at least a first source over time to obtain successive instances of first location information regarding said mobile unit (col. 9, lines 10-45, the BTS are constantly checking the quality of the mobile's signal strengths so that a good determination of the location of the mobile unit can be performed); performing a comparison to determine whether a location of said mobile unit as indicated by said monitored information satisfies a defined relationship relative to stored location information (col. 8, lines 1-30 and 43-54; col. 9, lines 10-45, the information provided regarding the position of the mobile may be utilized to pinpoint the exact location of the mobile unit); based on said comparison, selectively obtaining second location information regarding said mobile unit from at least a second source different than said first source (col. 9, lines 47-67; col. 10, lines 36-67; col. 11, lines 19-50 more accuracy of the position of the mobile may obtained by using several BTSes, which are able to detect the mobile unit's signal; hence, corresponding to a second form of providing the mobile location); and providing an output related to said location request based on said second location information (col. 11, lines 51-61, the location determination about the mobile location is communicated to systems that require such location information).

Regarding claim 16, Reudink et al. disclose a method, wherein said step of performing a comparison comprises using said parameter information to define a condition to be evaluated with respect to the desired location information and making a determination as to whether said first location information is sufficient to evaluate said condition (col. 10, lines 36-57, the system utilizes multiple beams at one of the two base stations to determine the accuracy of the mobile position; that is after determining that uncertainty was presented when utilizing only on TDA calculation or as utilizing signal strength alone).

Regarding claim 17, Reudink et al. disclose a method, wherein said step of selectively obtaining comprises obtaining said second location information when said first information is insufficiently accurate to determine whether said location of said mobile unit satisfies said defined relationship (col. 10, lines 36-51, the use of two TDA calculations provide a more trustful determination of the mobile location as compared to just one TDA calculation, which produces uncertainty of the position).

Regarding claim 18, Reudink et al. disclose a method, wherein said step of providing an output comprises outputting a rating value for use in billing a call associated with said mobile unit (col. 12, lines 7-11, location information may also be conformed of service options such as billing related to the mobile location).

Regarding claim 19, Reudink et al. disclose a method for use in providing location information regarding mobile units in a telecommunications network, comprising the steps of: first obtaining identification information regarding a mobile unit to be located and parameter information regarding the desired location information (col. 6,

lines 43-58, it is inherent as evidenced by the fact that one of ordinary skill in the art would have recognized that a code representing the identity of a mobile station is transmitted from the mobile to the mobile switching center when a mobile is first powered on, such a identity code corresponds to a mobile identification number (MIN) and/or an Electronic Serial Number (ESN); Further, the mobile unit, while communicating with BTSes, provides several attributes of a signal to the BTS; hence, providing parameter information to acquire mobile location information); second obtaining first location information identifying an approximate location of said mobile unit based on a network subdivision of said telecommunications network (col. 7, lines 9-47, location information regarding the mobile unit is provided in relation to its position within the cellular network as seen and detected by the BTSes); performing a comparison of the first location information to the parameter information (col.9, lines 31- 67; col. 10, lines 1-6 and 46-67, signal strengths are calculated and compared to obtain the most accurate location of the mobile); based on said comparison, selectively obtaining second location information, where said second location information has a location accuracy greater than that of said first location information (col. 9, lines 47-67; col. 10, lines 36-67; col. 11, lines 19-50, the second method utilized to acquire the exact location of the mobile when using additional BTSes provide high degree of confidence for the determination of the mobile location); and providing an output related to said location request based on said second location information (col. 11, lines 51-61, the location determination about the mobile location is communicated to systems that require such location information).

Regarding claim 20, Reudink et al. disclose a method, wherein said step of performing a comparison comprises using said parameter information to define a condition to be evaluated with respect to the desired location information and making a determination as to whether said first location information is sufficient to evaluate said condition (col. 10, lines 36-57, the system utilizes multiple beams at one of the two base stations to determine the accuracy of the mobile position; that is after determining that uncertainty was presented when utilizing only on TDA calculation or as utilizing signal strength alone).

Regarding claim 21, Reudink et al. disclose a method, wherein said step of selectively obtaining comprises obtaining said second location information when said first location information yields an ambiguity with regard to the desired location information (col. 10, lines 36-51, the use of two TDA calculations provide a more trustful determination of the mobile location as compared to just one TDA calculation, which produces uncertainty of the position).

Regarding claim 22, Reudink et al. disclose a method, wherein said step of selectively obtaining comprises receiving information from network based location determination equipment (col. 6, lines 59-67; col. 7, lines 1-8; col.10, lines 1-14, the network control system provides determination about the mobile position).

Regarding claim 23, Reudink et al. disclose a method, wherein said step of providing an output comprises outputting a rating value for use in billing a call associated with said mobile unit (col. 12, lines 7-11, location information may also be conformed of service options such as billing related to the mobile location).

Regarding claim 24, Reudink et al. disclose a method a method for use in providing location information for mobile units in a wireless network, comprising the steps of: receiving first information regarding a location of interest for a first mobile unit (col. 11, lines 51-67; col. 12, lines 1-11, location information related to the mobile unit is communicated to the E911 center, corresponding to data related to location of interest about the mobile unit location is sent to E911 center); receiving a first indication of a location of said first mobile unit at a first time (col. 11, lines 36-42, an initial location of the mobile may be provided); and based on said first information regarding said location of interest and said first indication regarding said first location of said first mobile unit at said first time, determining a timing for obtaining a second indication of a second location of said first mobile unit (col. 11, lines 19-67, the results acquired from the first method, not being so accurate as to the exact location of the mobile, leads to the initial location determination being repeated several times in order to get an accurate result and to later provide an optimum degree of confidence regarding the location of the mobile).

Regarding claim 25, Reudink et al. disclose a method, wherein said step of receiving said first information comprises receiving information defining a geographical zone used by a location-based services application (col. 10, lines 46-67; col. 11, lines 62-67; col. 12, lines 12-26, a determination with precise accuracy may be obtained with the use of several base stations; indeed, providing a location related to a geographic position).

Regarding claim 26, Reudink et al. disclose a method, wherein said first step of receiving a first indication comprises obtaining Cell ID information regarding said first mobile unit (col. 9, lines 65-67; col. 10, lines 1-14, the mobile unit's signals are received by the BTSes, which, in fact, are associated with several base stations and to which the BTSes provide information about the cell and sector location information to the MSC; indeed, corresponding to the Cell ID data within the network).

Regarding claim 27, Reudink et al. disclose a method, wherein said step of determining a timing comprises determining a length of time to wait before obtaining said second information based on a distance between said location of interest and said first location (col. 11, lines 19-67, the initial location determination is conducted several times at certain time periods ion order to provide a better location decision at a later time).

Regarding claim 28, Reudink et al. disclose a method for use in providing location information regarding mobile units in a telecommunications network, comprising the steps of: providing an interface for use in obtaining location information from a first source and a second source, said first source having a first quality of service characteristic and said second source having a second quality of service characteristic (col. 7, lines 9-47; col. 8, lines 1-30, RF frequency is used as interface to provide signal strength signaling to and from the BTSes, the signal strength corresponding to one characteristic of the mobile; as well as the time difference of arrival, which relates the difference on the arrival of the signals to and from where the mobile is located, corresponding to a second characteristic); determining a required quality of service for a

first location operation to locate a first mobile unit (col. 7, lines 28-42, the multibeam system, which comprises quality signal strengths, used by the system provides means to determine a precise location of the mobile); and based on said required quality of service, using said interface to obtain said location information from said selected one of said first and second sources (col. 7, lines 28-57, data regarding the exact location of the mobile unit may be obtained).

Regarding claim 29, Reudink et al. disclose a method, wherein said step of determining comprises obtaining initial location information from said first source having said first quality of service and determining that said first quality of service is insufficient for said first location operation (col. 10, lines 36-51, the use of two TDA calculations provide a more trustful determination of the mobile location as compared to just one TDA calculation, which produces uncertainty of the position).

Regarding claim 30, Reudink et al. disclose a method, wherein said step of determining comprises identifying said first operation as being one of a primary monitoring operation for obtaining general location information or a secondary locating operation, responsive to said primary monitoring operation, for obtaining specific location information (col. 9, lines 10-45, the BTS are constantly checking the quality of the mobile's signal strengths so that a good determination of the location of the mobile unit can be performed).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the art with respect to providing a mobile unit's position and methods for billing a wireless system.

US Pat. No. RE38, 267 to Borkowski et al.	Coverage area reporting method
US Pat. No. 5926133 to Green	Location system
US Pat. No. 5774829 to Cisneros	Navigation and positioning system
US Pat. No. 560706 to Dun et al.	Determining the position of a mobile
US Pat. No. 5913170 to Wortham	Location system using mobile communications

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio R Perez whose telephone number is (703) 305-8637. The examiner can normally be reached on 7:00 - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JP
9/8/04

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